

APR 27 2006

Appl No. 10/807,708
Response dated April 27, 2006
Reply to Office Action of January 23, 2006

IN THE CLAIMS:

Please amend the claims to read as follows:

1. (Currently amended) An improved tong positioning device, comprising:
 - a. a base portion;
 - b. a first arm portion pivotally attached to the base portion;
 - c. a power means engaged to a first end of the first arm portion;
 - d. an extension arm portion attached to the a second end of the first arm portion;
 - e. a second arm portion pivotally attached to a second end ~~or an~~ of the extension arm portion ~~of the arm portion~~; and
 - f. a second end of the second arm portion secured to a tong, so that pivotal movement of the arm portions imparted by the power means imparts movement of the tong between engaged and disengaged positions around tubular members.
2. (Original) The device in claim 1, wherein the power means comprises a hydraulic cylinder.
3. (Original) The device in claim 1, wherein the power means comprises an air cylinder.
4. (Currently Amended) The device in claim ~~1~~ 2, wherein the first arm is attached to an end of a piston in the hydraulic cylinder.
5. (Original) The device in claim 1, wherein the first arm is driven by the power means to impart pivoting motion to the second arm portion and forward and backward motion to the tong.
6. (Currently Amended) The device in claim 1, wherein the second arm portion further comprises a pair of air cylinders which define a means for allowing the arm to impart smooth, non-jerky contact with and movement to the tong.
7. (Currently Amended) The device in claim 1 wherein the pivot points between the power means, first arm member portion and second arm portion are variable to compensate for the vertical and horizontal movement of the tong during operation.
8. (Currently Amended) The device in claim 1, further comprising a protective shield

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positionable over the device so that minimum contact with ~~the moving parts of~~ the device by an operator is achieved.

9. (Currently Amended) The device in claim 1, wherein the first articulating arm portion defines a moment arm moveable between vertical and horizontal positions on the base.

10. (Currently Amended) The device in claim 1, wherein the second articulating arm portion defines a forward shock absorbing arm member providing ease of movement of the tong.

11. (Currently Amended) An improved tong positioning apparatus, comprising:

a. a power means;

b. an articulating means comprising a first moment arm pivotally secured to the power means at a first end and a second forward shock absorbing arm secured at a first end to the power means; and

c. a second end of the articulating means attached to a tong to impart movement of the tong between engaged and disengaged positions around a tubular member ~~when the power means articulates the articulating means~~.

12. (Original) The apparatus in claim 11, wherein the power means comprises a hydraulic cylinder, air cylinder or other power device.

13. (Canceled)

14. (Original) The apparatus in claim 13, wherein the forward shock absorbing arm further comprises at least one air or gas shock/cylinder for absorbing shock between the arm and the tong, so as to impart smooth movement of the tong as it contacts lengths of tubular members.

15. (Currently Amended) An improved tong positioning apparatus, comprising:

a. a base, including a powered cylinder;

b. a first articulating arm attached at a first end to the cylinder and pivotally attached to the base;

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c. a second armed attached at a first end to a second end of the first articulating arm;
d. a tong attached to a second end of the second arm, so that when the cylinder moves from retracted and expanded positions, the first and second arms articulate to move the tong between engaged and disengaged positions relative to conjoined tubular members.

16. (Currently Amended) The apparatus in claim 15, further comprising a protective shield to protect the operator of the apparatus from ~~moving parts of~~ the apparatus.

17. (Currently Amended) The apparatus in claim 15, wherein the connections between the powered cylinder and the first arm provide a plurality of alternate connection points.

18. (Currently Amended) The apparatus in claim 15, wherein the pivot points between the first arm and the base define a plurality of alternate connection points.

19. (Currently Amended) The apparatus in claim 15, wherein the connection between the first arm and the second arm define a plurality of alternate connection points.

20. (Currently Amended) The apparatus in claim 15, wherein the plurality of alternate connection points between the cylinder and the base, and the first arm and the base and the first arm and the second arm define a means to allow a variation of the horizontal and vertical position of the device relative to the tong.

21. (Currently Amended) An improved tong positioning apparatus, comprising:

- a. a base, including a powered cylinder;
- b. a first articulating arm attached at a first end to the cylinder and pivotally attached to the base;
- c. a second arm attached at a first end to a second end of the first articulating arm;
- d. a tong attached to a second end of the second arm, so that when the cylinder moves from retracted and expanded positions, the first and second arms articulate to move the tong between engaged and disengaged positions relative to conjoined tubular members.

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22. (Currently Amended) An improved method to position and align the power tong to engage and disengage positions relative to conjoined tubular members:

- a. ~~a~~ A tong guide system which guides the power tongs onto each pipe section;
- b. ~~A the~~ A tong guide system articulating the alignment of the upper tong and lower tong in relation to each jaw - die combination and each pipe section utilizing positioning and alignment pads;
- c. A means for visual acuity utilizing miniature intrinsically safe video cameras mounted in such position and location and close proximity to the power tong located at the pipe sections being connected to one another, in order to observe the makeup procedure by utilizing monitors and further may also review digital or VHS taping before and during makeup of the threaded pipe connections.